Ilan Sela and Sylvia Zeitoune-Simovich

Serial No.: Filed:

09/889,821 July 18, 2001

Page 2

## REMARKS

The Examiner required restriction to one of the following inventions under 35 U.S.C. §§ 121 and 372:

- I. Claims 1-7, 9, 11, 13, 15-19 and 21-30, allegedly drawn to a first product, an expression silencing system comprising a nucleotide sequence corresponding to the T7 RNA polymerase gene which sequence carries an NLS sequence, and a T7 promoter and at least one target sequence downstream of said T7 promoter, said system capable of rendering the expression at the RNA level of a target sequence in a plant cell substantially silenced, and a first method, for the transformation of a plant with a gene-silencing system or of silencing the expression of a target sequence in the genome of a plant;
- II. Claims 1-3, 5-9, 11-13, 15-19 and 27-30, allegedly drawn to a second product, an expression silencing system comprising a nucleotide sequence corresponding to the T7 RNA polymerase gene which sequence carries an NLS sequence, and a T7 promoter and at least one target sequence downstream of said T7 promoter, said system capable of rendering the expression at the RNA level of a target sequence in a plant pathogen substantially silenced, and a second method, of silencing the expression of a target sequence in the genome of a plant pathogen;
- III. Claims 1-3, 5, 6, 10, 11, 13, 16, 17 and 19, allegedly drawn to a third product, an expression silencing system comprising a nucleotide sequence corresponding to the T7

Ilan Sela and Sylvia Zeitoune-Simovich

Serial No.: Filed:

09/889,821 July 18, 2001

Page 3

>

RNA polymerase gene which sequence carries an NLS sequence, and a T7 promoter and at least one target sequence downstream of said T7 promoter, said system capable of rendering the expression at the RNA level of a target sequence in a mammalian cell substantially silenced;

- IV. Claims 1-3, 5, 6, 10, 11, 13, 14, 16, 17 and 19, allegedly drawn to a fourth product, an expression silencing system comprising a nucleotide sequence corresponding to the T7 RNA polymerase gene which sequence carries an NLS sequence, and a T7 promoter and at least one target sequence downstream of said T7 promoter, said system capable of rendering the expression at the RNA level of a target sequence in a mammalian pathogen substantially silenced;
- V. Claims 1-3, allegedly drawn to a fifth product, an expression silencing system comprising a nucleotide sequence corresponding to the T7 RNA polymerase gene which sequence carries an NLS sequence, and a T7 promoter and at least one target sequence downstream of said T7 promoter, said system capable of rendering the expression at the RNA level of a target sequence in a bacterium substantially silenced;
- VI. Claims 1-3, allegedly drawn to a sixth product, an expression silencing system comprising a nucleotide sequence corresponding to the T7 RNA polymerase gene which sequence carries an NLS sequence, and a T7 promoter and at least one target sequence downstream of said T7 promoter, said system capable of rendering the expression

Ilan Sela and Sylvia Zeitoune-Simovich

Serial No.: Filed:

09/889,821 July 18, 2001

Page 4

at the RNA level of a target sequence in a bacterial pathogen substantially silenced;

- VII. Claims 1-3, allegedly drawn to a seventh product, an expression silencing system comprising a nucleotide sequence corresponding to the T7 RNA polymerase gene which sequence carries an NLS sequence, and a T7 promoter and at least one target sequence downstream of said T7 promoter, said system capable of rendering the expression at the RNA level of a target sequence in a yeast cell substantially silenced;
- VIII. Claims 1-3, allegedly drawn to an eighth product, an expression silencing system comprising a nucleotide sequence corresponding to the T7 RNA polymerase gene which sequence carries an NLS sequence, and a T7 promoter and at least one target sequence downstream of said T7 promoter, said system capable of rendering the expression at the RNA level of a target sequence in a yeast pathogen substantially silenced;
- IX. Claims 20 and 22-26, allegedly drawn to a third method, a process for the transformation of a plant with a genesilencing system comprising transforming plant cells with a first DNA construct comprising a nucleotide sequence corresponding to the T7 RNA polymerase, at least one plant promoter and at least one plant terminator sequence, and a second DNA construct comprising a T7 promoter, a targeting sequence downstream to said promoter, and at least one 3' non-translated terminator sequence, selecting plant cells transformed with at least one DNA construct, and hybridizing a plant with said

Applicants: Ilan Sela and Sylvia Zeitoune-Simovich

Serial No.: 09/889,821 Filed: July 18, 2001

Page 5

first DNA construct with a plant transformed with said second DNA construct; and

X. Claims 31 and 32, allegedly drawn to a fourth method, of identifying a nucleic acid of interest within a plant genome.

The Examiner stated that the inventions listed as Groups I-X allegedly do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the expression silencing system capable of silencing a target sequence in a plant cell of Group I is not shared with the silencing system capable of silencing a target sequence in a plant pathogen of Group II, a mammalian cell of Group III, a mammalian pathogen of Group IV, a bacterial cell of Group V, a bacterial pathogen of Group VI, a yeast cell of Group VII, or a yeast pathogen of Group VIII. The Examiner stated that the particular host cells of each of Groups I-VIII are not shared by each other. The Examiner stated that the expression silencing systems comprising a nucleotide sequence corresponding to the T7RNA polymerase gene which sequence carries an NLS sequence of Groups I-VIII are not shared by the process for plant transformation with a gene-silencing system of Group IX, which does not comprise an NLS sequence. The Examiner stated that the identification of a nucleic acid of interest of the method of Group X is not shared with any of the other groups.

In response to this restriction requirement, applicants' undersigned attorney, on behalf of applicants, hereby elects, with traverse, to prosecute the invention of Examiner's Group I, i.e. claims 1-7, 9, 11, 13, 15-19 and 21-30, allegedly drawn to a

Ilan Sela and Sylvia Zeitoune-Simovich

Serial No.: Filed:

09/889,821 July 18, 2001

Page 6

first product, an expression silencing system comprising a nucleotide sequence corresponding to the T7 RNA polymerase gene which sequence carries an NLS sequence, and a T7 promoter and at least one target sequence downstream of said T7 promoter, said system capable of rendering the expression at the RNA level of a target sequence in a plant cell substantially silenced, and a first method, for the transformation of a plant with a genesilencing system or of silencing the expression of a target sequence in the genome of a plant.

Applicants, however, respectfully request that Groups II-VIII, be rejoined with Group I for examination on the merits. Each one of the restriction groups are directed to overlapping claims, i.e. claims 1-3. The only difference appears to be an election of what should be characterized as a "species," that is, a particular type of cell (either a plant cell, a mammalian cell, a bacterial cell, a yeast cell or pathogens thereof). Therefore, since overlapping claims are identified for each of Groups I-VIII, applicants request that the Examiner withdraw the restriction requirement and rejoin these groups.

Under 35 U.S.C. §121, restriction may be required if two or more independent and distinct inventions are claimed in one application. Under M.P.E.P. §803, the Examiner must examine the application on the merits, even though it includes claims to distinct inventions, if the search and examination can be made without serious burden.

The inventions of Groups I-X are not independent. Under M.P.E.P. §802.01, "independent" means there is no disclosed relationship between the subject matter claimed. The inventions of Groups I-VIII are drawn to an expression silencing system comprising a

Applicants: Serial No.:

Ilan Sela and Sylvia Zeitoune-Simovich

09/889,821 July 18, 2001

Filed: Page 7

nucleotide sequence corresponding to the T7 RNA polymerase gene which sequence carries an NLS sequence, and a T7 promoter and at least one target sequence downstream of said T7 promoter, said system capable of rendering the expression at the RNA level of a target sequence in a cell substantially silenced. Groups IX-X are merely drawn to methods of using the invention. Applicants therefore maintain that groups I-X are not independent and restriction is not proper.

Furthermore, under M.P.E.P. §803, the Examiner must examine the application on the merits if examination can be made without serious burden, even if the application would include claims to distinct or independent inventions. That is, there are two criteria for a proper requirement for restriction: (1) the invention must be independent and distinct, and (2) there must be a serious burden on the Examiner if restriction is not required.

Applicants respectfully submit that there would not be a serious burden on the Examiner if restriction were not required, because a search of the prior art relevant to the claims of Groups II-X would not require a serious burden once the prior art relevant to Group I has been identified.

Therefore, there would be no serious burden on the Examiner to examine Groups I-X together in the subject application. the Examiner must examine these Groups on the merits.

.In view of the foregoing, applicants maintain that restriction is not proper under 35 U.S.C. §121 and respectfully request that the Examiner reconsider and withdraw the requirement for restriction.

If a telephone interview would be of assistance in advancing

Ilan Sela and Sylvia Zeitoune-Simovich

Serial No.: Filed:

09/889,821 July 18, 2001

Page 8

prosecution of the subject application, applicants' undersigned attorney invites the Examiner to telephone him at the number provided below.

No fee, other than the \$55.00 fee for a one-month extension of time, is deemed necessary in connection with the filing of this Communication. However, if any additional fee is required, authorization is hereby given to charge the amount of such fee to Deposit Account No. 03-3125.

Respectfully submitted,

I hereby certify that this correspondence is being deposited this date with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

eg No. 28,678

F. White

Registration No. 28,678 Attorney for Applicants Cooper & Dunham LLP 1185 Avenue of the Americas

New York, New York 10036 Tel. No. (212) 278-0400